

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

SIGNIFY NORTH AMERICA CORPORATION)
and SIGNIFY HOLDING B.V.,)
)
Plaintiffs,)
) C.A. No. _____
v.)
) **JURY TRIAL DEMANDED**
CURRENT LIGHTING SOLUTIONS, LLC,)
)
Defendant.)

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiffs Signify North America Corporation and Signify Holding B.V. (collectively, “Signify”) for their Complaint against Current Lighting Solutions, LLC (“Current”), allege as follows:

NATURE OF THE ACTION

1. This is a civil action for patent infringement arising under the patent laws of the United States, 35 U.S.C. § 1 *et seq.* including 35 U.S.C. § 271, which gives rise to the remedies specified under 35 U.S.C. §§ 281 and 283-285.

THE PARTIES

2. Plaintiff Signify North America Corporation (formerly known as Philips Lighting North America Corporation) is a corporation organized and existing under the laws of Delaware with its principal place of business at 400 Crossing Boulevard, Suite 600, Bridgewater, New Jersey 08807.

3. Plaintiff Signify Holding B.V. (formerly known as Philips Lighting Holding B.V.) is a corporation organized and existing under the laws of the Netherlands with its registered office at High Tech Campus 48, 5656 AE Eindhoven, The Netherlands.

4. On information and belief, Current is a limited liability company organized and existing under the laws of Delaware located at 25825 Science Park Beachwood, OH 44122, doing business in the United States and in the state of Delaware. On information and belief, Current has designated Corporate Creations Network Inc., 3411 Silverside Rd., Tatnall Building, Ste 104, Wilmington, DE 19810 as its agent for service of process.

JURISDICTION AND VENUE

5. This Court has subject-matter jurisdiction over this patent infringement action pursuant to 28 U.S.C. §§ 1331 and 1338 and because this action arises under the patent laws of the United States, 35 U.S.C. § 271, *et seq.*

6. This Court has personal jurisdiction over Current in this action because Current has committed acts within this District giving rise to this action, and Current has established minimum contacts with this forum such that the exercise of jurisdiction over Current would not offend traditional notions of fair play and substantial justice. Current, directly and through subsidiaries or intermediaries, has conducted business and committed and continues to commit acts of infringement in this District by, among other things, making, using, importing, offering to sell, and selling products and providing services that infringe the Asserted Patents, and/or has induced acts of patent infringement by others in this judicial district, the State of Delaware, and elsewhere in the United States. Personal jurisdiction by this Court over Current is appropriate at least under a specific jurisdiction and/or stream of commerce theory. Upon information and belief, Current imports LED products, including the infringing products in this case, through several ports of entry throughout the United States. Current intends for its LED products to be sold throughout the United States, including Delaware. In addition, Current delivers LED products, including the products accused of infringement in this case, into the stream of commerce with the expectation that they

will be purchased by customers in Delaware. Current intends to and actually does serve the Delaware market, either directly or indirectly, with its LED products. On information and belief, Current utilizes established distribution channels to distribute, market, offer for sale, sell, service, and warrant infringing products directly to consumers, including offering such products for sale via authorized agents located throughout the state of Delaware. Current utilizes multiple brands to design, develop, import, distribute, and service infringing products. Such Current products have been sold in retail stores, both brick and mortar and online, within this judicial district and in Delaware. For example, Current's website lists Billows Electric Supply of Wilmington, Delaware as an authorized distributor of Current products, among other Wilmington locations. *See, e.g.*, <https://www.gecurrent.com/where-to-buy>. As another example, Current products, such as the Evolve LED Area Light (EAN), are offered for sale online. *See, e.g.*, <https://www.lightmart.com/ge-evolve-led-area-light-120-277-volt-28-700-lumens-281-watt-4000k-dark-bronze-eals/>.

7. Current is aware that its products will reach Delaware, and is further aware that its LED products are actually sold in Delaware. These infringing products have been and continue to be purchased by and used by consumers in Delaware. The exercise of jurisdiction over Current would be fair and reasonable. Personal jurisdiction by this Court over Current is also appropriate because Current has had and has substantial, continuous, and systematic contacts with this forum and has purposefully availed itself of the benefits of conducting activities in the forum by purposefully directing its activities toward this state and this District. Indeed, Current has already admitted that that it is subject to personal jurisdiction in this District in a separate case. *See CAO Lighting, Inc. v. GE Lighting, Inc. et al*, C.A. No. 1-20-cv-00681, D.I. 59 at ¶ 10 (D. Del. Feb. 16, 2021).

8. Plaintiffs incorporate herein the allegations contained in the preceding paragraphs. Venue is proper in this judicial district pursuant to at least 28 U.S.C. § 1391(b) and (c) and 28 U.S.C. § 1400(b). On information and belief, Current is a limited liability company organized and existing under the laws of Delaware, and Current has designated Corporate Creations Network Inc., 3411 Silverside Rd., Tatnall Building, Ste 104, Wilmington, DE 19810 as its agent for service of process. Furthermore, Current may be sued in this district because it conducts regular business in this district through distributors and because it commits acts of infringement (i.e., sells and offers to sell accused products) in this district. In addition, this Court has already held venue of a patent litigation claim against Current is proper when it denied Current's motion to transfer in a separate case. *See Lighting Science Group Corp. v. General Electric Co. et al.*, C.A. No. 19-0806, D.I. 47 (D. Del. Jul. 22, 2019).

THE PATENTS-IN-SUIT

9. Philips Lighting, now known as "Signify," is a global market leader in solid state and connected lighting with unparalleled expertise in the development, manufacturing, and application of innovative LED lighting solutions.

10. Signify is known the world over for being at the forefront of lighting innovation. Signify and its inventors have won many awards for their lighting work, including the famed L-Prize and the IPO inventor of the year. Signify has used its cutting-edge technology to bring world class LED light installations at iconic American landmarks, such as the Empire State building, the San Francisco Bay Bridge, and the Ben Franklin Bridge.



11. Signify's LED products are even used to light the iconic houses along nearby Boathouse Row.



12. To protect its intellectual property resulting from its significant investments, Signify has obtained numerous patents directed to various LED inventions and technologies. For example, Signify's LED-related patents include U.S. Patent Nos. 7,358,706; 7,262,559; 8,629,631; 7,654,703; 9,249,965; and 7,670,038 (collectively, the "Patents-in-Suit").

13. U.S. Patent No. 7,358,706 (the “‘706 Patent”), titled “Power Factor Correction Control Methods and Apparatus,” was duly and legally issued by the United States Patent and Trademark Office on April 15, 2008. The ‘706 Patent relates to methods and systems for controlling power delivered to a load. ‘706 Patent at 1:15-20. Plaintiff Signify North America Corporation is the assignee and owner of all right, title, and interest in the ‘706 Patent, a copy of which is attached as Exhibit 1.

14. U.S. Patent No. 7,262,559, (the “‘559 Patent”), titled “LEDS driver,” was duly and legally issued by the United States Patent and Trademark Office on August 28, 2007. The ‘559 Patent relates to a power supply for LEDs . ‘559 Patent at Abs. Plaintiff Signify Holding B.V., formerly known as Philips Lighting Holding B.V., is the assignee and owner of all right, title, and interest in the ‘559 Patent, a copy of which is attached as Exhibit 2.

15. U.S. Patent No. 8,629,631 (the “‘631 Patent”), titled “Method and System for Improving Start-Up Time of a Light Emitting Diode (LED) Driver at Reduced Input Voltage,” was duly and legally issued by the United States Patent and Trademark Office on January 14, 2014. The ‘631 Patent relates to “[i]mproving start-up time of a light emitting diode (led) driver at lower input voltage is accomplished with a quick start circuit comprising a constant current source that replaces the traditional trickle charge start-up path for charging of a Vcc capacitor supplying operating voltage to an SMPS controller.”’631 Patent at Abs. Plaintiff Signify Holding B.V., formerly known as Philips Lighting Holding B.V., is the assignee and owner of all right, title, and interest in the ‘631 Patent, a copy of which is attached as Exhibit 3.

16. U.S. Patent No. 7,654,703 (the “‘703 Patent”), titled “Directly Viewable Luminaire,” was duly and legally issued by the United States Patent and Trademark Office on February 2, 2010. The ‘703 Patent relates to devices that include thermally separate compartments

for a luminaire. Plaintiff Signify Holding B.V., formerly known as Philips Lighting Holding B.V., is the assignee and owner of all right, title, and interest in the '703 Patent, a copy of which is attached as Exhibit 4.

17. U.S. Patent No. 9,249,965 (the "'965 Patent"), titled "Lighting Device," was duly and legally issued by the United States Patent and Trademark Office on February 2, 2016. The '965 Patent relates to an improved lighting device that is better able to cool individual heat sources in a lighting device. Plaintiff Signify Holding B.V., formerly known as Philips Lighting Holding B.V., is the assignee and owner of all right, title, and interest in the '965 Patent, a copy of which is attached as Exhibit 5.

18. U.S. Patent No. 7,670,038 (the "'038 Patent"), titled "LED Collimator Element with an Asymmetrical Collimator," was duly and legally issued by the United States Patent and Trademark Office on March 2, 2010. The '038 Patent relates to an LED collimator '038 Patent at Abs.; 1:4. Plaintiff Signify Holding B.V., formerly known as Philips Lighting Holding B.V., is the assignee and owner of all right, title, and interest in the '038 Patent, a copy of which is attached as Exhibit 6.

FACTUAL BACKGROUND

19. On information and belief, Current is in the business of offering for sale, selling, and distributing lighting products including light products based on LED technology.

20. On information and belief, Current offers its infringing products online and in brick and mortar locations, to sell and distribute products throughout the United States, including this District. For example, Current's website lists Billows Electric Supply of Wilmington, Delaware as an authorized distributor of Current products, among other Wilmington locations. *See, e.g.*, <https://www.gecurrent.com/where-to-buy>. As another example, Current products, such as the

Evolve LED Area Light (EAN), are offered for sale online. *See, e.g.,* <https://www.lightmart.com/ge-evolve-led-area-light-120-277-volt-28-700-lumens-281-watt-4000k-dark-bronze-eals/>.

21. On information and belief, Current makes, uses, offers to sell, sells, and/or imports the accused products.

22. On information and belief, Current makes, uses, offers to sell, sells, and/or imports Lumination Recessed LED Luminaire RPL22 Model RPL22A03XMM840VQRMWHTE, infringing the '706 Patent. Lumination Recessed LED Luminaire RPL22 Model RPL22A03XMM840VQRMWHTE is mapped to the claims of the '706 Patent later in this complaint: An image of Lumination Recessed LED Luminaire RPL22 Model RPL22A03XMM840VQRMWHTE is provided below.



See, e.g., https://www.candelacorp.com/spec/?prod_num=RPL22A03XMM840VQRMWHTE.

23. On information and belief, Current makes, uses, offers to sell, sells, and/or imports Evolve LED Area Light EANB, infringing the '559 Patent. Evolve LED Area Light EANB is mapped to the claims of the '559 Patent later in this complaint: An image of Evolve LED Area Light EANB is provided above.

24. On information and belief, Current makes, uses, offers to sell, sells, and/or imports LED Evolve Security Light Model 48TM69 (hereinafter “LED Evolve Security Light E2SA”),

infringing the '631 Patent. LED Evolve Security Light E2SA is mapped to the claims of the '631 Patent later in this complaint: An image of LED Evolve Security Light E2SA is provided below.



See, e.g., <https://www.brite-lite.com/led-fixtures/ge/e2sa/evolve-led-security-light>.

25. On information and belief, Current makes, uses, offers to sell, sells, and/or imports the Evolve LED Series (EAL) Area Light Model EALS020F4AF740NDD1DKBZH (herein after "Evolve LED Area Light EALS" thereby infringing the '703 Patent. A picture of the Evolve LED Area Light EALS is shown below:



26. On information and belief, Current makes, uses, offers to sell, sells, and/or imports GE HID Replacement lights, such as the model 93986445 shown below, thereby infringing the '965 Patent. An exemplary GE HID Replacement light is mapped to the claims of the '965 Patent later in this complaint.



27. On information and belief, Current makes, uses, offers to sell, sells, and/or imports the aforementioned Evolve LED Area Light EALS, infringing the '038 Patent. The Evolve LED Area Light EALS is mapped to the claims of the '038 Patent later in this complaint. An image of an Evolve LED Area Light EALS is again provided below.



28. At least as early as June 22, 2018, Current received actual notice that certain of its products infringe the '559 Patent, the '703 Patent and the '038 Patent.

29. At least as early as July 30, 2021, Current received actual notice that certain of its products infringe the '631 Patent and '965 Patent.

30. At least as early as September 12, 2022, Current received actual notice that certain of its products infringe the '706 Patent.

31. After receiving actual notice of its infringement from Signify, Current continued its infringing activities despite being aware of Signify's notice of infringement and the risk that it is infringing Signify's patents. Accordingly, Current's ongoing infringement has been and continues to be willful.

GENERAL ALLEGATIONS

32. Current has directly and indirectly infringed and continues to directly and indirectly infringe each of the Patents-in-Suit by engaging in acts constituting infringement under 35 U.S.C. § 271(a), (b), and/or (c), including but not necessarily limited to one or more of making, using, selling, offering to sell, and importing into the United States, and inducing and contributing to

infringement by others, in this District and elsewhere in the United States, the products identified below.

33. Current's acts of infringement have caused damage to Signify. Signify is entitled to recover from Current the damages sustained by Signify as a result of Current's wrongful acts in an amount subject to proof at trial.

34. Current's infringement of the Patents-in-Suit has been and continues to be willful. Current has been aware of its infringement of Signify's patents since it received notice of infringement, but has continued to sell those products despite being forewarned of its infringement.

35. Current has committed and continues to commit acts of infringement despite a high likelihood that its actions constitute infringement, and Current knew or should have known that its actions constituted an unjustifiably high risk of infringement.

36. Current's infringement of the Patents-in-Suit is causing irreparable harm for which Signify has no adequate remedy at law unless Current is enjoined by this Court. Under 35 U.S.C. § 283, Signify is entitled to a permanent injunction against further infringement of the Patents-in-Suit.

37. In the interest of providing detailed averments of infringement, Signify has identified below at least one claim per patent to demonstrate infringement. However, the selection of claims should not be considered limiting, and additional claims of the Patents-in-Suit that are infringed by Current will be disclosed in compliance with any applicable local rules and standing orders.

COUNT ONE

(Infringement of U.S. Patent No. 7,358,706)

38. Signify incorporates by reference the allegations set forth in the preceding paragraphs as though fully set forth herein.

39. On information and belief, Current has directly infringed and is directly infringing claims of the '706 Patent, including at least claim 1, in violation of 35 U.S.C. § 271(a) by manufacturing, using, offering to sell, selling, and/or importing infringing products including, but not limited to, products substantially similar to Lummation Recessed LED Luminaire RPL22 (*e.g.*, Model RPL22A03XMM840VQRMWHT) mapped below, and/or other products with substantially similar features (collectively, the "'706 Accused Products").

40. Signify names this exemplary infringing instrumentality to serve as notice of Current's infringing acts, but Signify reserves the right to name additional infringing products, known to or learned by Signify or revealed during discovery, and include them in the definition of the '706 Accused Products.

41. Claim 1 of the '706 Patent recites:

1. A power factor correction apparatus, comprising:

at least one first switch; and

at least one switch controller to control the at least one first switch based at least on a predetermined desired power to be provided to a load coupled to the power factor correction apparatus,

wherein the at least one switch controller is configured to process:

a first signal representing an AC line voltage to which the power factor correction apparatus is coupled;

a second signal representing an actual AC current drawn by the power factor correction apparatus;

a third signal representing a DC voltage output by the power factor correction apparatus; and

a fourth signal representing the predetermined desired power to be provided to the load,

so as to generate a first switch control signal to control the at least one first switch.

42. On information and belief, Lumption Recessed LED Luminaire RPL22 (*e.g.*,

Model RPL22A03XMM840VQRMWHTE) includes a power factor correction apparatus, comprising: at least one first switch; and at least one switch controller to control the at least one first switch based at least on a predetermined desired power to be provided to a load coupled to the power factor correction apparatus. For example, as shown in Exhibit 7, the Lumption Recessed LED Luminaire RPL22 (*e.g.*, Model RPL22A03XMM840VQRMWHTE) includes a Lumption™ RPL Driver that includes at least one first switch and a switch controller that includes at least an ON Semiconductor NCL30186 that controls the at least one first switch. As shown in Exhibit 8, one of the listed features of the ON Semiconductor NCL30186 is “power factor correction.” As shown in Exhibit 9, the at least one switch controller controls the switch labeled AOTF8N80 Q1. As shown in Exhibit 9, control of the at least one switch is based at least in part on input received at the terminals labeled “DIMMING CONTROL INPUT TERMINAL BLOCK,” which provides a predetermined desired power to be provided to a load coupled to the power factor correction apparatus.

43. On information and belief, Lumption Recessed LED Luminaire RPL22 (*e.g.*,

Model RPL22A03XMM840VQRMWHTE) includes the at least one switch controller, which is configured to process: a first signal representing an AC line voltage to which the power factor correction apparatus is coupled. For example, as shown in Exhibit 9, the at least one switch

controller is configured to process a signal representing the AC line voltage received at the terminals labeled “AC MAINS INPUT.”

44. On information and belief, Lumination Recessed LED Luminaire RPL22 (*e.g.*, Model RPL22A03XMM840VQRMWHTE) includes a second signal representing an actual AC current drawn by the power factor correction apparatus. For example, as shown in Exhibit 9, the at least one switch controller is configured to process a signal representing the AC current drawn from the “AC MAINS INPUT.”

45. On information and belief, Lumination Recessed LED Luminaire RPL22 (*e.g.*, Model RPL22A03XMM840VQRMWHTE) includes a third signal representing a DC voltage output by the power factor correction apparatus. For example, as shown in Exhibit 9, the at least one switch controller is configured to process a signal representing the voltage labeled “+LED.”

46. On information and belief, Lumination Recessed LED Luminaire RPL22 (*e.g.*, Model RPL22A03XMM840VQRMWHTE) includes a fourth signal representing the predetermined desired power to be provided to the load. For example, as shown in Exhibit 9, the at least one switch controller is configured to process a signal representing the input received at the terminals labeled “DIMMING CONTROL INPUT TERMINAL BLOCK.”

47. On information and belief, Lumination Recessed LED Luminaire RPL22 (*e.g.*, Model RPL22A03XMM840VQRMWHTE) generates a first switch control signal to control the at least one first switch. For example, as shown in Exhibit 9, the at least one switch controller controls the switch labeled AOTF8N80 Q1. Control of the at least one switch is based at least in part on input received at the terminals labeled “DIMMING CONTROL INPUT TERMINAL BLOCK,” which provides a predetermined desired power to be provided to a load coupled to the power factor correction apparatus.

48. The full extent of Current's infringement is not presently known to Signify. On information and belief, Current has made and sold, or will make and sell, products under different names or part numbers that infringe the '706 Patent in a similar manner. Signify makes this preliminary identification of infringing products and infringed claims without the benefit of discovery or claim construction in this action, and expressly reserves the right to augment, supplement, and revise its identifications based on additional information obtained through discovery or otherwise. Signify will identify each claim of the '706 Patent that is infringed and each product that Signify is aware of that infringes the '706 Patent in accordance with the applicable scheduling order in this case.

49. On information and belief, Current has been aware of and has had notice of the '706 Patent and its infringement of the '706 Patent at least as early as September 12, 2022, when it received a letter from Signify informing it of the same.

50. Current's knowledge of the '706 Patent and its infringement of the same cannot be disputed as Current filed a declaratory judgement action seeking, among other things, a declaration that certain Current products do not infringe on June 22, 2023. *See Current Lighting Solutions, LLC v. Signify Holding B.V., et al.* C.A. No. 1:23-cv-11398 (D.Mass.). Current has not served Signify with this action.

51. On information and belief, by continuing to make, use, sell, offer to sell, and/or import the '706 Accused Products on or after Current first had notice of Signify's allegations of infringement, Current indirectly infringes and continues to indirectly infringe at least claim 1 of the '706 Patent by active inducement under 35 U.S.C. § 271(b). Current has done so by acts including but not limited to (1) selling such products including features that—when used or resold—infringe, either literally or under the doctrine of equivalents, the '706 Patent; (2) marketing

the infringing capabilities of such products; and (3) providing instructions, technical support, and other support and encouragement for the infringing use of such products. Current has engaged in such conduct despite its knowledge that such conduct would and was intended to result in direct infringement by Current's direct and indirect customers, including the making, using, selling, offering for sale and/or importation of the '706 Accused Products in the United States. Current has performed and continues to perform these affirmative acts with knowledge of the '706 Patent and with knowledge that such actions would induce infringement of the '706 Patent by Current's direct and indirect customers.

52. On information and belief, by continuing to make, use, sell, offer to sell and/or import the '706 Accused Products on or after Current first had notice of Signify's allegations of infringement, Current indirectly infringes and continues to indirectly infringe at least claim 1 of the '706 Patent by contributorily infringing under 35 U.S.C. § 271(c). Current's affirmative acts of manufacturing, selling, offering for sale, and/or importing the '706 Accused Products and components thereof, including drivers within the '706 Accused Products, in this District and elsewhere in the United States, contribute to Current's customers and end-users directly infringing the '706 Patent. The '706 Accused Products and drivers made for use with the '706 Accused Products are not staple articles or commodities of commerce, have no substantial non-infringing uses, and are known by Current to be especially made or especially adapted for use in infringement of the '706 Patent.

53. On information and belief, Current has performed and continues to perform the above-identified acts of infringement with knowledge of the '706 Patent and with intent, or willful blindness, that they cause the direct and indirect infringement of the '706 Patent. Accordingly,

Current's continued infringement of the '706 Patent is willful and deliberate, entitling Signify to increased damages under 35 U.S.C. § 284.

54. On information and belief, Signify has suffered and continues to suffer damages as a result of Current's infringement of the '706 Patent in an amount to be determined at trial.

55. On information and belief, Current's infringement of the '706 Patent is causing irreparable harm for which Signify has no adequate remedy at law unless Current is enjoined by this Court. Under 35 U.S.C. § 283, Signify is entitled to a permanent injunction against further infringement of the '706 Patent.

56. On information and belief, and in light of the allegations above, including Current's willful infringement of the '706 Patent, this case is exceptional under 35 U.S.C. § 285, entitling Signify to costs and attorneys' fees incurred in prosecuting this action.

COUNT TWO

(Infringement of U.S. Patent No. 7,262,559)

57. Signify incorporates by reference the allegations set forth in the preceding paragraphs as though fully set forth herein.

58. On information and belief, Current has directly infringed and is directly infringing claims of the '559 Patent, including at least claim 10, in violation of 35 U.S.C. § 271(a) by manufacturing, using, offering to sell, selling, and/or importing infringing products including, but not limited to, products substantially similar to Evolve LED Area Light EANB mapped below, and/or other products with substantially similar features (collectively, the "'559 Accused Products").

59. Signify names this exemplary infringing instrumentality to serve as notice of Current's infringing acts, but Signify reserves the right to name additional infringing products,

known to or learned by Signify or revealed during discovery, and include them in the definition of the '559 Accused Products.

60. Claim 10 of the '559 Patent recites:

10. A power supply for an LED light source, said power supply comprising:

a power converter operable to provide a regulated power including a LED current and a LED voltage;

an LED control switch operable to control a flow of the LED current through the LED light source; and

a current sensor operable to sense the LED current flowing through the LED light source, said current sensor including

an differential amplifier, and

means for adjusting a gain of said differential amplifier,

wherein said LED control switch is further operable to clamp a peak of the LED current during an initial loading stage of the LED light source.

61. On information and belief, the Evolve LED Area Light EANB includes a power supply for an LED light source, said power supply comprising: a power converter operable to provide a regulated power including a LED current and a LED voltage. For example, as shown below and in Exhibit 10, the Evolve LED Area Light EANB includes the “UltraMax™ Programmable LED Driver.” As shown in Exhibit 11, the “UltraMax™ Programmable LED Driver” is operable to provide a regulated power including a LED current and a LED voltage at the terminals labeled “LED OUTPUT WIRE LEADS.”



See, e.g., <https://www.candelacorp.com/spec>

62. On information and belief, the Evolve LED Area Light EANB includes an LED control switch operable to control a flow of the LED current through the LED light source. For example, as shown in Exhibit 11, these elements are met by circuitry including at least the component(s) labeled “L6599AD,” “IPA65R660CFD Q101,” and/or “IPA65R660CFD Q102.” Furthermore, the L6599 component includes “soft-start” functionality that progressively increases converter power capability during start-up, which allows average input current to smoothly increase.

See STMicroelectronics Data Sheet, available at <https://www.st.com/resource/en/datasheet/l6599.pdf>.

63. On information and belief, the Evolve LED Area Light EANB includes a current sensor operable to sense the LED current flowing through the LED light source, said current sensor including an differential amplifier, and means for adjusting a gain of said differential amplifier. For example, as shown in Exhibit 11, these elements are met by circuitry including at least the component(s) “T104 TRANSFORMER,” “U602B LM2904,” “R606” resistor, and “R608” resistor.

64. On information and belief, the Evolve LED Area Light EANB includes said LED control switch, which is further operable to clamp a peak of the LED current during an initial loading stage of the LED light source. For example, as shown in Exhibit 11, these elements are met by circuitry including at least the component(s) labeled “L6599AD,” “IPA65R660CFD Q101,” and/or “IPA65R660CFD Q102.” Furthermore, the L6599 component includes “soft-start” functionality that progressively increases converter power capability during start-up, which allows average input current to smoothly increase. *See* STMicroelectronics Data Sheet, available at <https://www.st.com/resource/en/datasheet/l6599.pdf>.

65. The full extent of Current’s infringement is not presently known to Signify. On information and belief, Current has made and sold, or will make and sell, products under different names or part numbers that infringe the ’559 Patent in a similar manner. Signify makes this preliminary identification of infringing products and infringed claims without the benefit of discovery or claim construction in this action, and expressly reserves the right to augment, supplement, and revise its identifications based on additional information obtained through discovery or otherwise. Signify will identify each claim of the ’559 Patent that is infringed and each product that Signify is aware of that infringes the ’559 Patent in accordance with the applicable scheduling order in this case.

66. On information and belief, Current has been aware of and has had notice of the ’559 Patent and its infringement of the ’559 Patent at least as early as June 22, 2018, when it received a letter from Signify informing it of the same.

67. Current’s knowledge of the ’559 Patent and its infringement of the same cannot be disputed as Current filed a declaratory judgement action seeking, among other things, a declaration that certain Current products do not infringe on June 22, 2023. *See Current Lighting Solutions,*

LLC v. Signify Holding B.V., et al. C.A. No. 1:23-cv-11398 (D.Mass.). Current has not served this action.

68. On information and belief, by continuing to make, use, sell, offer to sell, and/or import the '559 Accused Products on or after Current first had notice of Signify's allegations of infringement, Current indirectly infringes and continues to indirectly infringe at least claim 10 of the '559 Patent by active inducement under 35 U.S.C. § 271(b). Current has done so by acts including but not limited to (1) selling such products including features that—when used or resold—infringe, either literally or under the doctrine of equivalents, the '559 Patent; (2) marketing the infringing capabilities of such products; and (3) providing instructions, technical support, and other support and encouragement for the infringing use of such products. Current has engaged in such conduct despite its knowledge that such conduct would and was intended to result in direct infringement by Current's direct and indirect customers, including the making, using, selling, offering for sale and/or importation of the '559 Accused Products in the United States. Current has performed and continues to perform these affirmative acts with knowledge of the '559 Patent and with knowledge that such actions would induce infringement by Current's direct and indirect customers..

69. On information and belief, by continuing to make, use, sell, offer to sell and/or import the '559 Accused Products on or after Current first had notice of Signify's allegations of infringement, Current indirectly infringes and continues to indirectly infringe at least claim 10 of the '559 Patent by contributorily infringing under 35 U.S.C. § 271(c). Current's affirmative acts of manufacturing, selling, offering for sale, and/or importing the '559 Accused Products and components thereof, including drivers within the '559 Accused Products, in this District and elsewhere in the United States, contribute to Current's customers and end-users directly infringing

the '559 Patent. The '559 Accused Products and drivers made for use with the '559 Accused Products are not staple articles or commodities of commerce, have no substantial non-infringing uses, and are known by Current to be especially made or especially adapted for use in infringement of the '559 Patent.

70. On information and belief, Current has performed and continues to perform the above-identified acts of infringement with knowledge of the '559 Patent and with intent, or willful blindness, that they cause the direct and indirect infringement of the '559 Patent. Accordingly, Current's continued infringement of the '559 Patent is willful and deliberate, entitling Signify to increased damages under 35 U.S.C. § 284.

71. On information and belief, Signify has suffered and continues to suffer damages as a result of Current's infringement of the '559 Patent in an amount to be determined at trial.

72. On information and belief, Current's infringement of the '559 Patent is causing irreparable harm for which Signify has no adequate remedy at law unless Current is enjoined by this Court. Under 35 U.S.C. § 283, Signify is entitled to a permanent injunction against further infringement of the '559 Patent.

73. On information and belief, and in light of the allegations above, including Current's willful infringement of the '559 Patent, this case is exceptional under 35 U.S.C. § 285, entitling Signify to costs and attorneys' fees incurred in prosecuting this action.

COUNT THREE

(Infringement of U.S. Patent No. 8,629,631)

74. Signify incorporates by reference the allegations set forth in the preceding paragraphs as though fully set forth herein.

75. On information and belief, Current has directly infringed and is directly infringing claims of the '631 Patent, including at least claim 1, in violation of 35 U.S.C. § 271(a) by manufacturing, using, offering to sell, selling, and/or importing infringing products including, but not limited to, products substantially similar to LED Evolve Security Light E2SA mapped below, and/or other products with substantially similar features (collectively, the "'631 Accused Products").

76. Signify names this exemplary infringing instrumentality to serve as notice of Current's infringing acts, but Signify reserves the right to name additional infringing products, known to or learned by Signify or revealed during discovery, and include them in the definition of the '631 Accused Products.

77. Claim 1 of the '631 Patent recites:

1. A switch mode power supply (SMPS) having improved start-up time at reduced input voltage, comprising:

a rectifier circuit for converting an alternating current (AC) power source to a direct current (DC) power source;

a SMPS transformer having a primary winding thereof coupled to the DC power source and a controller supply winding for powering a SMPS controller;

a power transistor switch coupled to the primary winding of the SMPS transformer;

the SMPS controller having a drive output and a Vcc power supply input, wherein the drive output is coupled to the power transistor switch such that the SMPS controller controls when the power transistor switch turns on or off;

a Vcc power supply capacitor coupled to the Vcc power supply input of the SMPS controller;

a first rectifier diode coupled between the controller power winding of the SMPS transformer and the Vcc power supply capacitor; and

a start-up constant current source coupled between the DC power source and the Vcc power supply capacitor,

wherein the start-up constant current source provides a constant current charge to the Vcc power supply capacitor until a threshold voltage is reached thereon, then the start-up constant current source shuts off and charging voltage to the Vcc power supply capacitor is supplied by the controller power supply winding of the SMPS transformer through the first rectifier diode.

78. To the extent the preamble limits the claim, on information and belief, the LED Evolve Security Light E2SA includes a switch mode power supply (SMPS) having improved start-up time at reduced input voltage. For example, as shown in Exhibit 12, the LED Evolve Security Light E2SA includes a switch mode power supply (SMPS) (*e.g.*, including circuitry shown in Exhibit 12) having improved start-up time at reduced input voltage, as explained further below.

79. On information and belief, the LED Evolve Security Light E2SA includes a rectifier circuit for converting an alternating current (AC) power source to a direct current (DC) power source. For example, as shown in Exhibit 12, the LED Evolve Security Light E2SA includes a rectifier circuit (*e.g.*, diodes D1, D2, D8, and D9) for converting an alternating current (AC) power source (*e.g.*, AC mains input) to a direct current (DC) power source (*e.g.*, +HVDC).

80. On information and belief, the LED Evolve Security Light E2SA includes a SMPS transformer having a primary winding thereof coupled to the DC power source and a controller supply winding for powering a SMPS controller. For example, as shown in Exhibit 12, the LED Evolve Security Light E2SA includes a SMPS transformer (*e.g.*, T1) having a primary winding (*e.g.*, top winding on primary side) thereof coupled to the DC power source (*e.g.*, +HVDC) and a controller supply winding (*e.g.*, bottom winding on primary side) for powering a SMPS controller (*e.g.*, U2).

81. On information and belief, the LED Evolve Security Light E2SA includes a power transistor switch coupled to the primary winding of the SMPS transformer. For example, as shown in Exhibit 12, the LED Evolve Security Light E2SA includes a power transistor switch (*e.g.*, Q2) coupled to the primary winding of the SMPS transformer.

82. On information and belief, the LED Evolve Security Light E2SA includes the SMPS controller having a drive output and a Vcc power supply input, wherein the drive output is coupled to the power transistor switch such that the SMPS controller controls when the power transistor switch turns on or off. For example, as shown in Exhibit 12, the LED Evolve Security Light E2SA includes the SMPS controller having a drive output (*e.g.*, GD pin 7) and a Vcc power supply input (*e.g.*, Vcc pin 8), wherein the drive output is coupled to the power transistor switch such that the SMPS controller controls when the power transistor switch turns on or off. On information and belief, and based on the circuitry of the SMPS controller and power transistor switch, the SMPS controller controls when the power transistor switch turns on or off.

83. On information and belief, the LED Evolve Security Light E2SA includes a Vcc power supply capacitor coupled to the Vcc power supply input of the SMPS controller. For example, as shown in Exhibit 12, the LED Evolve Security Light E2SA includes a Vcc power supply capacitor (*e.g.*, comprising capacitor C17, capacitor C5, and/or capacitor C34) coupled to the Vcc power supply input of the SMPS controller.

84. On information and belief, the LED Evolve Security Light E2SA includes a first rectifier diode coupled between the controller power winding of the SMPS transformer and the Vcc power supply capacitor. For example, as shown in Exhibit 12, the LED Evolve Security Light E2SA includes a first rectifier diode (*e.g.*, D5) coupled between the controller power winding of the SMPS transformer and the Vcc power supply capacitor.

85. On information and belief, the LED Evolve Security Light E2SA includes a start-up constant current source coupled between the DC power source and the Vcc power supply capacitor. For example, as shown in Exhibit 12, the LED Evolve Security Light E2SA includes a start-up constant current source (comprising, for example, R2, R3, R5, R8, Q1, D14, and D18) coupled between the DC power source and the Vcc power supply capacitor.

86. On information and belief, the LED Evolve Security Light E2SA includes a start-up constant current source coupled between the DC power source and the Vcc power supply capacitor wherein the start-up constant current source provides a constant current charge to the Vcc power supply capacitor until a threshold voltage is reached thereon, then the start-up constant current source shuts off and charging voltage to the Vcc power supply capacitor is supplied by the controller power supply winding of the SMPS transformer through the first rectifier diode. For example, on information and belief, and based on the circuitry as shown in Exhibit 12, the LED Evolve Security Light E2SA includes a start-up constant current source coupled between the DC power source and the Vcc power supply capacitor wherein the start-up constant current source (comprising, for example, R2, R3, R5, R8, Q1, D14, and D18) provides a constant current charge to the Vcc power supply capacitor (*e.g.*, comprising capacitor C17, capacitor C5, and/or capacitor C34) until a threshold voltage is reached thereon, then the start-up constant current source shuts off and charging voltage to the Vcc power supply capacitor is supplied by the controller power supply winding of the SMPS transformer (*e.g.*, bottom winding on primary side of T1) through the first rectifier diode (*e.g.*, D5).

87. The full extent of Current's infringement is not presently known to Signify. On information and belief, Current has made and sold, or will make and sell, products under different names or part numbers that infringe the '631 Patent in a similar manner. Signify makes this

preliminary identification of infringing products and infringed claims without the benefit of discovery or claim construction in this action, and expressly reserves the right to augment, supplement, and revise its identifications based on additional information obtained through discovery or otherwise. Signify will identify each claim of the '631 Patent that is infringed and each product that Signify is aware of that infringes the '631 Patent in accordance with the applicable scheduling order in this case.

88. On information and belief, Current has been aware of and has had notice of the '631 Patent and its infringement of the '631 Patent at least as early as July 30, 2021, when it received a letter from Signify informing it of the same.

89. Current's knowledge of the '631 Patent and its infringement of the same cannot be disputed as Current filed a declaratory judgement action seeking, among other things, a declaration that certain Current products do not infringe on June 22, 2023. *See Current Lighting Solutions, LLC v. Signify Holding B.V., et al.* C.A. No. 1:23-cv-11398 (D.Mass.). Current has not served this action.

90. On information and belief, by continuing to make, use, sell, offer to sell, and/or import the '631 Accused Products on or after Current first had notice of Signify's allegations of infringement, Current indirectly infringes and continues to indirectly infringe at least claim 1 of the '631 Patent by active inducement under 35 U.S.C. § 271(b). Current has done so by acts including but not limited to (1) selling such products including features that—when used or resold—infringe, either literally or under the doctrine of equivalents, the '631 Patent; (2) marketing the infringing capabilities of such products; and (3) providing instructions, technical support, and other support and encouragement for the infringing use of such products. Current has engaged in such conduct despite its knowledge that such conduct would and was intended to result in direct

infringement by Current's direct and indirect customers, including the making, using, selling, offering for sale and/or importation of the '631 Accused Products in the United States. Current has performed and continues to perform these affirmative acts with knowledge of the '631 Patent and with knowledge that such actions would induce infringement of the '631 Patent by Current's direct and indirect customers

91. On information and belief, by continuing to make, use, sell, offer to sell and/or import the '631 Accused Products on or after Current first had notice of Signify's allegations of infringement, Current indirectly infringes and continues to indirectly infringe at least claim 1 of the '631 Patent by contributorily infringing under 35 U.S.C. § 271(c). Current's affirmative acts of manufacturing, selling, offering for sale, and/or importing the '631 Accused Products and components thereof, including drivers within the '631 Accused Products, in this District and elsewhere in the United States, contribute to Current's customers and end-users directly infringing the '631 Patent. The '631 Accused Products and drivers within the '631 Accused Products are not staple articles or commodities of commerce, have no substantial non-infringing uses, and are known by Current to be especially made or especially adapted for use in infringement of the '631 Patent.

92. On information and belief, Current has performed and continues to perform the above-identified acts of infringement with knowledge of the '631 Patent and with intent, or willful blindness, that they cause the direct infringement of the '631 Patent. Accordingly, Current's continued infringement of the '631 Patent is willful and deliberate, entitling Signify to increased damages under 35 U.S.C. § 284.

93. On information and belief, Signify has suffered and continues to suffer damages as a result of Current's infringement of the '631 Patent in an amount to be determined at trial.

94. On information and belief, Current's infringement of the '631 Patent is causing irreparable harm for which Signify has no adequate remedy at law unless Current is enjoined by this Court. Under 35 U.S.C. § 283, Signify is entitled to a permanent injunction against further infringement of the '631 Patent.

95. On information and belief, and in light of the allegations above, including Current's willful infringement of the '631 Patent, this case is exceptional under 35 U.S.C. § 285, entitling Signify to costs and attorneys' fees incurred in prosecuting this.

COUNT FOUR

(Infringement of U.S. Patent No. 7,654,703)

96. Signify incorporates by reference the allegations set forth in the preceding paragraphs as though fully set forth herein.

97. On information and belief, Current has directly infringed and is directly infringing claims of the '703 Patent, including at least claim 17, in violation of 35 U.S.C. § 271(a) by manufacturing, using, offering to sell, selling, and/or importing infringing products, including, but not limited to, products substantially similar to the Evolve LED Area Light EALS (collectively, the "'703 Accused Products").

98. Signify names this exemplary infringing instrumentality to serve as notice of Current's infringing acts but Signify reserves the right to name additional infringing products, known to or learned by Signify or revealed during discovery, and include them in the definition of the '703 Accused Products.

99. Claim 17 of the '703 Patent recites:

17. A luminaire comprising:

a housing defining a first internal compartment containing one or more light-emitting diodes mounted on a base connected to the housing,

the housing further defining a second internal compartment containing electronic driver means coupled to the one or more light-emitting diodes for providing controlled electrical energy to the one or more light emitting diodes, said first internal compartment thermally separated from the second internal compartment, each of said first internal compartment and said second internal compartment configured to dissipate heat,

wherein the driver means comprises a controller coupled to a power supply to provide the controlled electrical energy,

wherein at least one of the controller and the power supply is thermally isolated within the second internal compartment,

wherein the housing further includes a base cover enclosing the second internal compartment, the base cover configured as a heat sink for at least one of the controller and the power supply, and

wherein the base cover is removably attached to the base.

100. On information and belief, the Evolve LED Area Light EALS provides a luminaire.

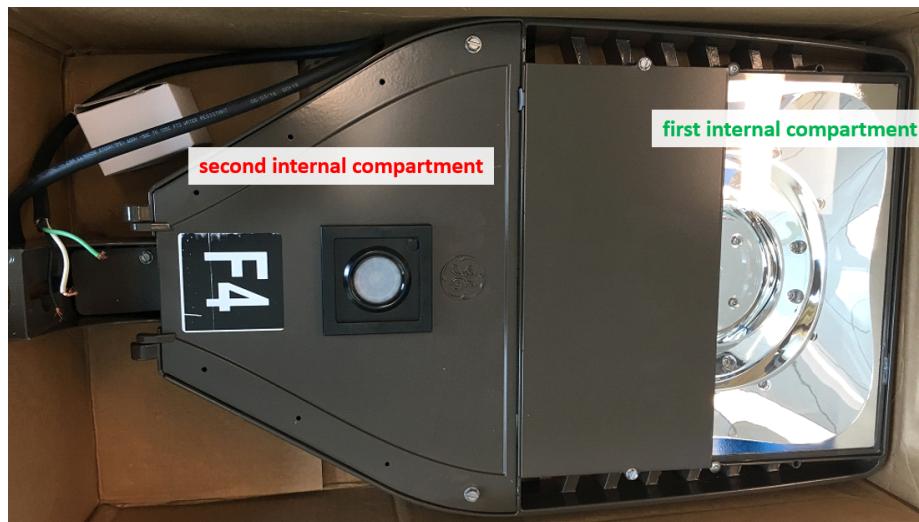
For example, this limitation is shown below.



Evolve LED Area Light EALS/EALP

The **EAL Area Light** luminaires offer a wide range of optical patterns, color temperatures, lumen packages, and mounting configurations to optimize area light applications, as well as provide versatility in lighting design within the same form-factor. They are ideal for commercial property site-lighting applications such as retail and commercial exteriors.

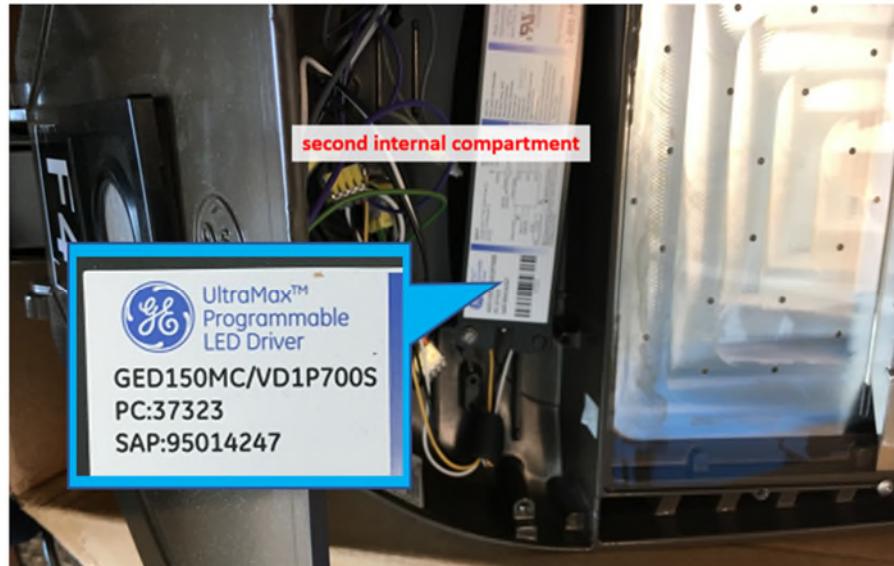
101. On information and belief, the Evolve LED Area Light EALS contains a housing defining a first internal compartment and a second internal compartment.



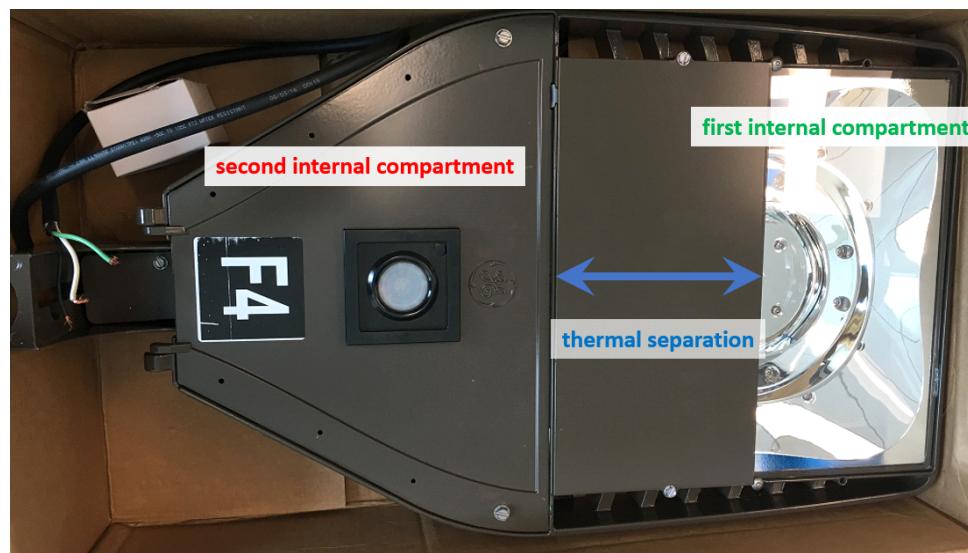
102. The first internal compartment of the Evolve LED Area Light EALS contains one or more light emitting diodes (elements), as shown in the pictures above and below, that are mounted on a base connected to the housing.



103. The Evolve LED Area Light EALS's housing defines a second internal compartment that contains electronic driver means. As shown below, this means includes the GE UltraMAX Programmable LED Driver (model GED150MC).



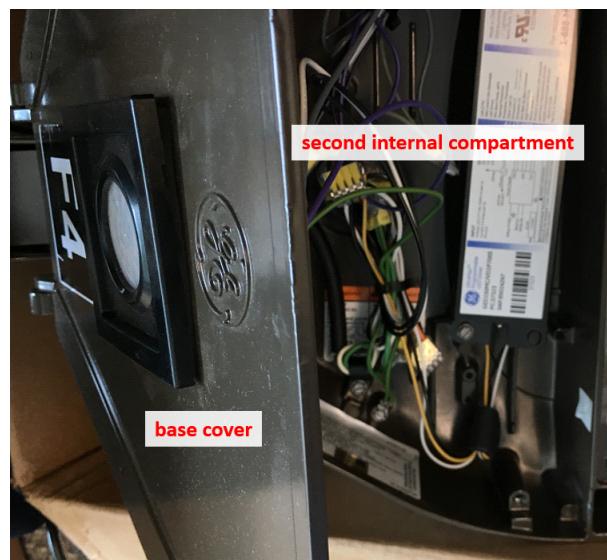
104. On information and belief, the Evolve LED Area Light EALS's first internal compartment is thermally separated from the second internal compartment, each of said first internal compartment and said second internal compartment configured to dissipate heat.



105. As shown below, the driver means of the Evolve LED Area Light EALS comprises a controller coupled to a power supply to provide the controlled electrical energy to the LEDs. The power supply and controller are thermally isolated within the second compartment as shown above and below.



106. The housing further includes a base cover enclosing the second internal compartment, the base cover configured as a heat sink for at least one of the controller and the power supply.



107. The Evolve LED Area Light EALS also contains a base cover that is removably attached to the base, as shown above.

108. The full extent of Current's infringement is not presently known to Signify. On information and belief, Current has made and sold, or will make and sell, products under different names or part numbers that infringe the '703 Patent in a similar manner. Signify makes this preliminary identification of infringing products and infringed claims without the benefit of discovery or claim construction in this action, and expressly reserves the right to augment, supplement, and revise its identifications based on additional information obtained through discovery or otherwise. Signify will identify each claim of the '703 Patent that is infringed and each product that Signify is aware of that infringes the '703 Patent in accordance with the applicable scheduling order in this case.

109. On information and belief, Current has been aware of and has had notice of the '703 Patent and its infringement of the '703 Patent since at least June 22, 2018, when it received a letter from Signify informing it of the same.

110. Current's knowledge of the '703 Patent and its infringement of the same cannot be disputed as Current filed a declaratory judgement action seeking, among other things, a declaration that certain Current products do not infringe on June 22, 2023. *See Current Lighting Solutions, LLC v. Signify Holding B.V., et al.* C.A. No. 1:23-cv-11398 (D.Mass.). Current has not served this action.

111. On information and belief, by continuing to make, use, sell, offer to sell, and/or import the '703 Accused Products on or after Current first had notice of Signify's allegations of infringement, Current indirectly infringes and continues to indirectly infringe at least claim 17 of the '703 Patent by active inducement under 35 U.S.C. § 271(b). Current has done so by acts

including but not limited to (1) selling such products including features that—when used or resold—infringe, either literally or under the doctrine of equivalents, the '703 Patent; (2) marketing the infringing capabilities of such products; and (3) providing instructions, technical support, and other support and encouragement for the infringing use of such products. Current has engaged in such conduct despite its knowledge that such conduct would and was intended to result in direct infringement by Current's direct and indirect customers, including the making, using, selling, offering for sale and/or importation of the '703 Accused Products in the United States. Current has performed and continues to perform these affirmative acts with knowledge of the '703 Patent and with knowledge that such actions would induce infringement of the '703 Patent by Current's direct and indirect customers.

112. On information and belief, by continuing to make, use, sell, offer to sell, and/or import the '703 Accused Products on or after Current first had notice of Signify's allegations of infringement, Current indirectly infringes and continues to indirectly infringe at least claim 17 of the '703 Patent by contributorily infringing under 35 U.S.C. § 271(c). Current's affirmative acts of manufacturing, selling, offering for sale, and/or importing the '703 Accused Products and components thereof, including those identified above, in this District and elsewhere in the United States, contribute to Current's customers and end-users directly infringing the '703 Patent. The '703 Accused Products and components thereof, including those identified above, are not staple articles or commodities of commerce, have no substantial non-infringing uses, and are known by Current to be especially made or especially adapted for use in infringement of the '703 Patent.

113. On information and belief, Current has performed and continues to perform the above-identified acts of infringement with knowledge of the '703 Patent and with intent, or willful blindness, that they cause the direct and indirect infringement of the '703 Patent. Accordingly,

Current's continued infringement of the '703 Patent is willful and deliberate, entitling Signify to increased damages under 35 U.S.C. § 284.

114. On information and belief, Signify has suffered and continues to suffer damages as a result of Current's infringement of the '703 Patent in an amount to be determined at trial.

115. On information and belief, Current's infringement of the '703 Patent is causing irreparable harm for which Signify has no adequate remedy at law unless Current is enjoined by this Court. Under 35 U.S.C. § 283, Signify is entitled to a permanent injunction against further infringement of the '703 Patent.

116. On information and belief, and in light of the allegations above, including Current's willful infringement of the '703 Patent, this case is exceptional under 35 U.S.C. § 285, entitling Signify to costs and attorneys' fees incurred in prosecuting this action.

COUNT FIVE

(Infringement of U.S. Patent No. 9,249,965)

117. Signify incorporates by reference the allegations set forth in the preceding paragraphs as though fully set forth herein.

118. On information and belief, Current has directly infringed and is directly infringing claims of the '965 Patent, including at least claim 1, in violation of 35 U.S.C. § 271(a) by manufacturing, using, offering to sell, selling, and/or importing infringing products, including, but not limited to, products substantially similar to GE LED HID Replacement model 93986445 (hereinafter the "GE LED HID Replacement") as mapped below, and/or other products with substantially similar features (collectively, the "'965 Accused Products").

119. Signify names this exemplary infringing instrumentality to serve as notice of Current's infringing acts but Signify reserves the right to name additional infringing products,

known to or learned by Signify or revealed during discovery, and include them in the definition of the '965 Accused Products.

120. Claim 1 of the '965 Patent recites:

1. A lighting device comprising:

a light source;

a driver spatially separated from and configured for powering said light source;

a light source heat sink to which said light source is thermally coupled; and

a driver heat sink to which said driver is thermally coupled;

wherein the light source heat sink and the driver heat sink are separated by an air gap to provide thermal decoupling of the light source heat sink and the driver heat sink,

an envelope for enclosing said light source, the envelope defining a cooling channel extending from an air inlet to said air gap such that the air gap is arranged in fluid communication with ambient air via the cooling channel, wherein said cooling channel is arranged in a reflector of said envelope or in the envelope itself.

121. The GE LED HID Replacement contains a light source, as evidenced by Current's own brochures and specifications.

LED HID TYPE B BT56 Lamps

SKU # 93096445



PHOTOMETRIC

Efficacy 144 LPW

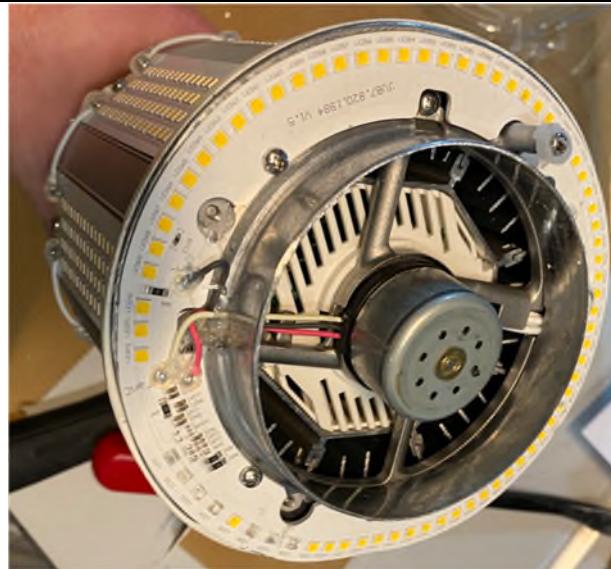
Lumens 65,000 lm

CCT 4000 K

CRI 70

See <https://www.gecurrent.com/catalog/led-hid-type-b-bt56-lamps-93096445>

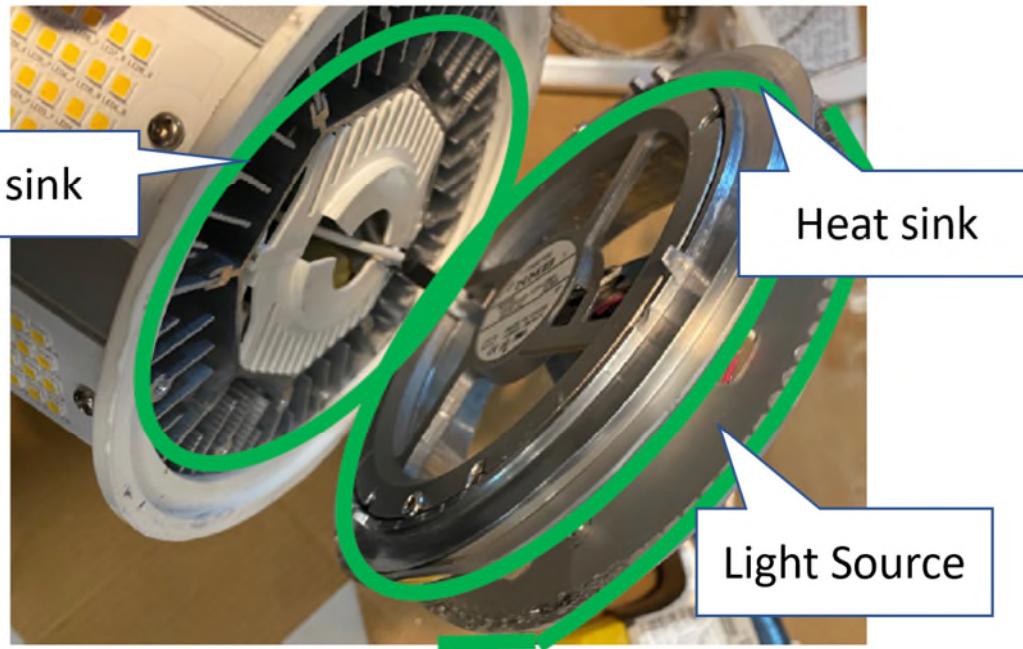
122. The GE LED HID Replacement contains a light source in the form of light emitting diodes as shown below.



123. The GE LED HID Replacement contains a driver that is spatially separated from and configured for powering said light source as shown in the picture below:



124. The GE LED HID Replacement contains a light source heat sink to which said light source is thermally coupled. This is shown below:

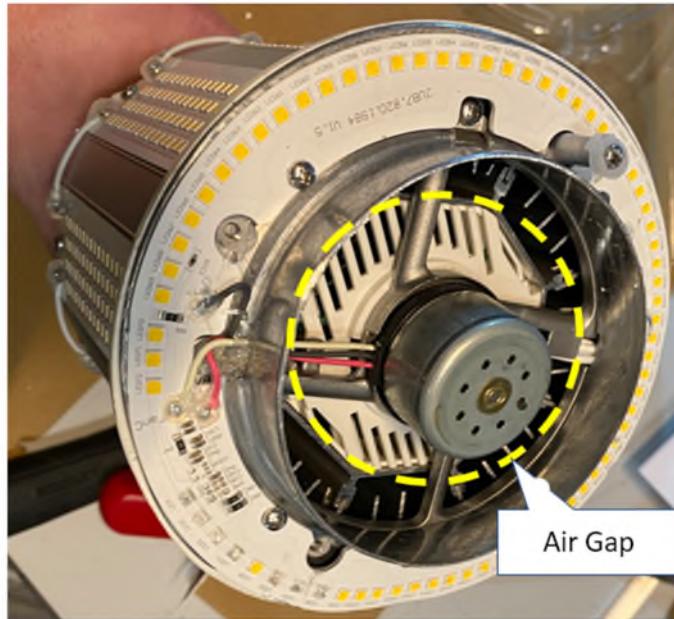


125. The GE LED HID Replacement includes a driver heat sink to which said driver is thermally coupled, as shown below:

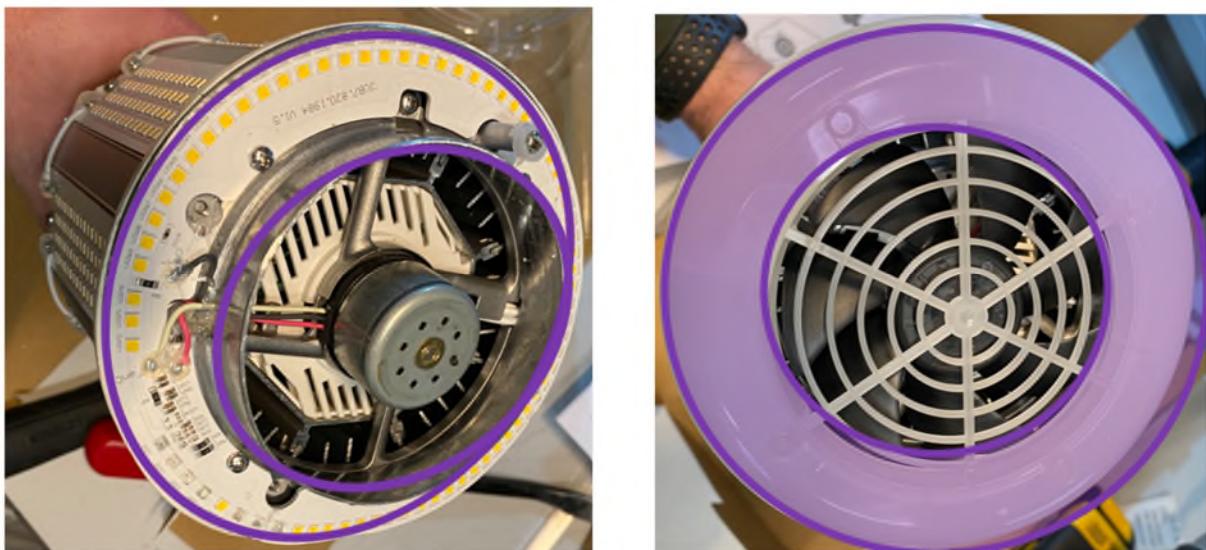


126. Upon information and belief, the GE LED HID Replacement's light source heat sink and the driver heat sink are separated by an air gap to provide thermal decoupling of the light

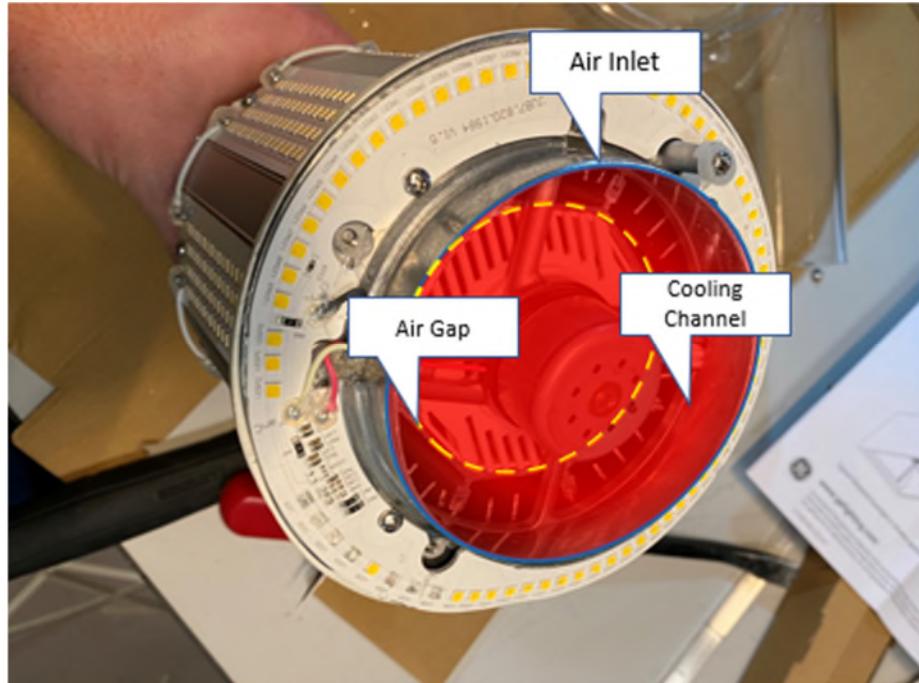
source heat sink and the driver heat sink. The air gap is denoted below, and extends into the core of the luminaire:



127. Upon information and belief, the GE LED HID Replacement contains an envelope for enclosing said light source, which is shown below in purple.



128. Upon information and belief, the envelope defines a cooling channel extending from an air inlet to said air gap such that the air gap is arranged in fluid communication with ambient air via the cooling channel as shown below.



129. Upon information and belief, the cooling channel is arranged in either a reflector of said envelope or in the envelope itself (or both). The metal extension surrounding the cooling channel upon information and belief functions as a reflector, and the cooling channel itself is within the envelope itself.

130. On information and belief, the full extent of Current's infringement is not presently known to Signify. On information and belief, Current has made and sold, or will make and sell, products under different names or part numbers that infringe the '965 Patent in a similar manner. Signify makes this preliminary identification of infringing products and infringed claims without the benefit of discovery or claim construction in this action, and expressly reserves the right to augment, supplement, and revise its identifications based on additional information obtained

through discovery or otherwise. Signify will identify each claim of the '965 Patent that is infringed and each product that Signify is aware of that infringes the '965 Patent in accordance with the applicable scheduling order in this case.

131. On information and belief, Current has been aware of and has had notice of the '965 Patent and its infringement of the '965 Patent since at least July 30, 2021, when it received a letter from Signify informing it of the same.

132. On information and belief, by continuing to make, use, sell, offer to sell, and/or import the '965 Accused Products on or after Current first had notice of Signify's allegations of infringement, Current indirectly infringes and continues to indirectly infringe at least claim 1 of the '965 Patent by active inducement under 35 U.S.C. § 271(b). Current has done so by acts including but not limited to (1) selling such products including features that—when used or resold—infringe, either literally or under the doctrine of equivalents, the '965 Patent; (2) marketing the infringing capabilities of such products; and (3) providing instructions, technical support, and other support and encouragement for the infringing use of such products. Current has engaged in such conduct despite its knowledge that such conduct would and was intended to result in direct infringement by Current's direct and indirect customers, including the making, using, selling, offering for sale and/or importation of the '965 Accused Products in the United States. Current has performed and continues to perform these affirmative acts with knowledge of the '965 Patent and with knowledge that such actions would induce infringement of the '965 Patent by Current's direct and indirect customers.

133. On information and belief, by continuing to make, use, sell, offer to sell, and/or import the '965 Accused Products on or after Current first had notice of Signify's allegations of infringement, Current indirectly infringes and continues to indirectly infringe at least claim 1 of

the '965 Patent by contributorily infringing under 35 U.S.C. § 271(c). Current's affirmative acts of manufacturing, selling, offering for sale, and/or importing the '965 Accused Products and components thereof, including those identified above, in this District and elsewhere in the United States, contribute to Current's customers and end-users directly infringing the '965 Patent. The '965 Accused Products and components thereof, including those identified above, are not staple articles or commodities of commerce, have no substantial non-infringing uses, and are known by Current to be especially made or especially adapted for use in infringement of the '965 Patent.

134. On information and belief, Current has performed and continues to perform the above-identified acts of infringement with knowledge of the '965 Patent and with intent, or willful blindness, that they cause the direct and indirect infringement of the '965 Patent. Accordingly, Current's continued infringement of the '965 Patent is willful and deliberate, entitling Signify to increased damages under 35 U.S.C. § 284.

135. On information and belief, Signify has suffered and continues to suffer damages as a result of Current's infringement of the '965 Patent in an amount to be determined at trial.

136. On information and belief, Current's infringement of the '965 Patent is causing irreparable harm for which Signify has no adequate remedy at law unless Current is enjoined by this Court. Under 35 U.S.C. § 283, Signify is entitled to a permanent injunction against further infringement of the '965 Patent.

137. On information and belief, and in light of the allegations above, including Current's willful infringement of the '965 Patent, this case is exceptional under 35 U.S.C. § 285, entitling Signify to costs and attorneys' fees incurred in prosecuting this action.

COUNT SIX

(Infringement of U.S. Patent No. 7,670,038)

138. Signify incorporates by reference the allegations set forth in the preceding paragraphs as though fully set forth herein.

On information and belief, Current has directly infringed and is directly infringing claims of the '038 Patent, including at least claim 1, in violation of 35 U.S.C. § 271(a) by manufacturing, using, offering to sell, selling, and/or importing infringing products, including, but not limited to, products substantially similar to the Evolve LED Area Light EALS mapped below, and/or other products with substantially similar features (collectively, the "'038 Accused Products").

139. Signify names this exemplary infringing instrumentality to serve as notice of Current's infringing acts but Signify reserves the right to name additional infringing products, known to or learned by Signify or revealed during discovery, and include them in the definition of the '038 Accused Products.

140. Claim 1 of the '038 Patent recites:

1. A device, comprising:

an LED which during operation emits a first portion of light directly into an emission angle region of the device; and

a collimator which deflects into the emission angle region of the device a second portion of the light of the LED which is not emitted by the LED directly into the emission angle region of the device, the collimator having a first face and a second face opposite the first face;

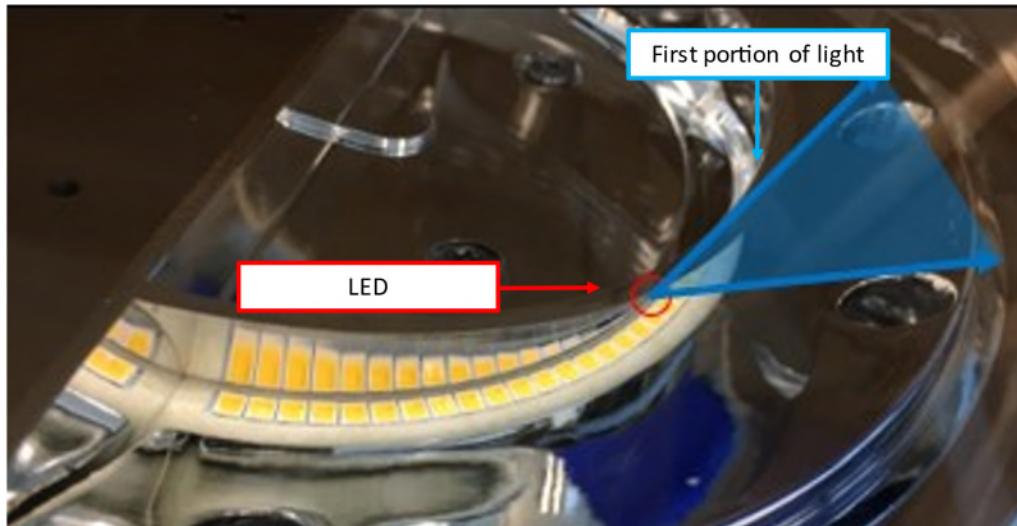
wherein the device is asymmetrical at least with respect to a collimator sectional plane so that a defined non-uniform light intensity distribution is achieved in an emission plane of the device which is orthogonal to the collimator sectional plane and to a main emission direction of the device,

and wherein the light intensity distribution in the emission plane decreases as a distance from the first face increases.

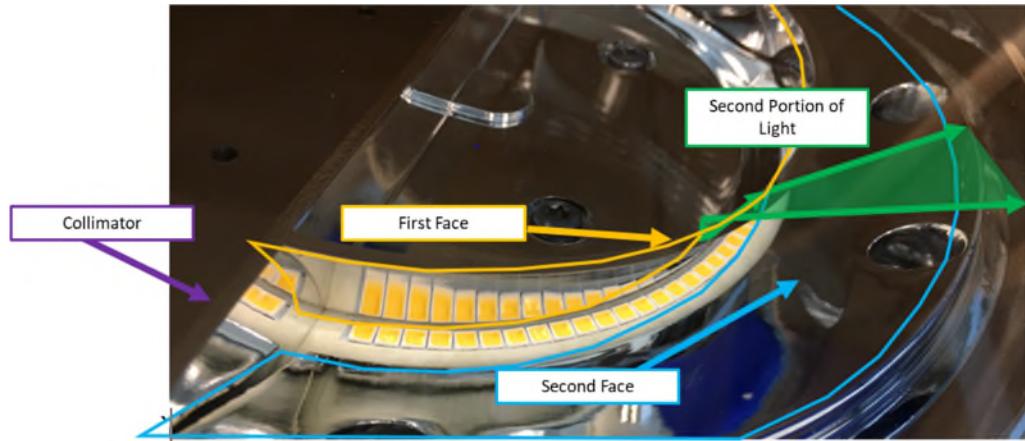
141. On information and belief, the Evolve LED Area Light EALS is a device. For example, this limitation is shown below.



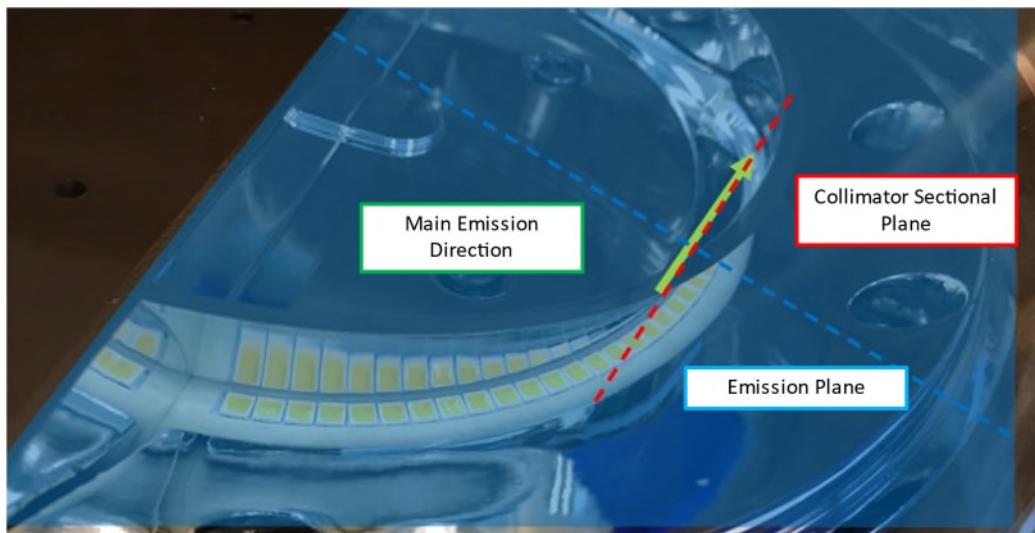
142. On information and belief, the Evolve LED Area Light EALS includes an LED which during operation emits a first portion of light directly into an emission angle region of the device. For example, this limitation is shown below.



143. On information and belief, the Evolve LED Area Light EALS includes a collimator which deflects into the emission angle region of the device a second portion of the light of the LED which is not emitted by the LED directly into the emission angle region of the device, the collimator having a first face and a second face opposite the first face. For example, this limitation is shown below.



144. On information and belief, the Evolve LED Area Light EALS is asymmetrical at least with respect to a collimator sectional plane so that a defined non-uniform light intensity distribution is achieved in an emission plane of the device which is orthogonal to the collimator sectional plane and to a main emission direction of the device, and wherein the light intensity distribution in the emission plane decreases as a distance from the first face increases. For example, this limitation is shown below.



145. The full extent of Current's infringement is not presently known to Signify. On information and belief, Current has made and sold, or will make and sell, products under different names or part numbers that infringe the '038 Patent in a similar manner. Signify makes this preliminary identification of infringing products and infringed claims without the benefit of discovery or claim construction in this action, and expressly reserves the right to augment, supplement, and revise its identifications based on additional information obtained through discovery or otherwise. Signify will identify each claim of the '038 Patent that is infringed and each product that Signify is aware of that infringes the '038 Patent in accordance with the applicable scheduling order in this case.

146. On information and belief, Current has been aware of and has had notice of the '038 Patent and its infringement of the '038 Patent since at least June 22, 2018, when it received a letter from Signify informing it of the same.

147. Current's knowledge of the '038 Patent and its infringement of the same cannot be disputed as Current filed a declaratory judgement action seeking, among other things, a declaration that certain Current products do not infringe on June 22, 2023. *See Current Lighting Solutions, LLC v. Signify Holding B.V., et al.* C.A. No. 1:23-cv-11398 (D.Mass.). Current has not served this action.

148. On information and belief, by making, using, selling, offering to sell, and/or importing the '038 Accused Products on or after Current first had notice of Signify's allegations of infringement, Current indirectly infringed and continues to indirectly infringe at least claim 1 of the '038 Patent by active inducement under 35 U.S.C. § 271(b). Current has done so by acts including but not limited to (1) selling such products including features that—when used or resold—infringe, either literally or under the doctrine of equivalents, the '038 Patent; (2) marketing

the infringing capabilities of such products; and (3) providing instructions, technical support, and other support and encouragement for the infringing use of such products. Current has engaged in such conduct despite its knowledge that such conduct would and was intended to result in direct infringement by Current's direct and indirect customers, including the making, using, selling, offering for sale and/or importation of the '038 Accused Products in the United States. Current has performed and continues to perform these affirmative acts with knowledge of the '038 Patent and with knowledge that such actions would induce infringement of the '038 Patent by Current's direct and indirect customers.

149. On information and belief, by making, using, selling, offering to sell, and/or importing the '038 Accused Products on or after Current first had notice of Signify's allegations of infringement, Current indirectly infringed and continues to indirectly infringe at least claim 1 of the '038 Patent by contributorily infringing under 35 U.S.C. § 271(c). Current's affirmative acts of manufacturing, selling, offering for sale, and/or importing the '038 Accused Products and components thereof, including those identified above, in this District and elsewhere in the United States, contribute to Current's customers and end-users directly infringing the '038 Patent. The '038 Accused Products and components thereof, including those identified above, are not staple articles or commodities of commerce, have no substantial non-infringing uses, and are known by Current to be especially made or especially adapted for use in infringement of the '038 Patent.

150. On information and belief, Current has performed and continues to perform the above-identified acts of infringement with knowledge of the '038 Patent and with intent, or willful blindness, that they cause the direct and indirect infringement of the '038 Patent. Accordingly, Current's continued infringement of the '038 Patent is willful and deliberate, entitling Signify to increased damages under 35 U.S.C. § 284.

151. On information and belief, Signify has suffered and continues to suffer damages as a result of Current's infringement of the '038 Patent in an amount to be determined at trial.

152. On information and belief, Current's infringement of the '038 Patent is causing irreparable harm for which Signify has no adequate remedy at law unless Current is enjoined by this Court. Under 35 U.S.C. § 283, Signify is entitled to a permanent injunction against further infringement of the '038 Patent.

153. On information and belief, and in light of the allegations above, including Current's willful infringement of the '038 Patent, this case is exceptional under 35 U.S.C. § 285, entitling Signify to costs and attorneys' fees incurred in prosecuting this action.

DEMAND FOR A JURY TRIAL

154. Signify hereby demands trial by jury on all claims and issues so triable.

PRAYER FOR RELIEF

WHEREFORE, Signify prays for the following judgments and relief:

- (a) A judgment that Current has infringed and is infringing the Patents-in-Suit;
- (b) A permanent injunction against Current and its affiliates, subsidiaries, assignees, employees, agents or anyone acting in privity or concert from infringing the Patents-in-Suit, including enjoining the making, offering to sell, selling, using, or importing into the United States products claimed in any of the claims of the Patents-in-Suit; using or performing methods claimed in any of the claims of the Patents-in-Suit; inducing others to use and perform methods that infringe any claim of the Patents-in-Suit; or contributing to others using and performing methods that infringe any claim of the Patents-in-Suit, until the expiration of the Patents-in-Suit;
- (c) A judgment that Current's infringement of the Patents-in-Suit was willful and that Current's continued infringement of the Patents-in-Suit is willful;

- (d) An award of damages adequate to compensate Signify for Current's patent infringement, and an accounting to adequately compensate Signify for the infringement, including, but not limited to, lost profits and/or a reasonable royalty;
- (e) An award of pre-judgment and post-judgment interest at the maximum rate allowed by law;
- (f) An award of damages for willful infringement;
- (g) An order finding that this is an exceptional case and awarding Signify its costs, expenses, disbursements, and reasonable attorneys' fees related to Current's patent infringement under 35 U.S.C. § 285 and all other applicable statutes, rules and common law; and
- (h) Such other further relief, in law or equity, as this Court deems just and proper.

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